



IFW

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q97365

Akira NAKAGAWARA, et al.

Appln. No.: 10/594,448

Group Art Unit: Unknown

Confirmation No.: Unknown

Examiner: Unknown

Filed: September 26, 2006

For: METHOD OF SCREENING COMPOUND CAPABLE OF ACCELERATING OR
INHIBITING APOPTOSIS, APOPTOSIS ACCELERATOR AND APOPTOSIS
INHIBITOR

INFORMATION DISCLOSURE STATEMENT

UNDER 37 C.F.R. §§ 1.97 and 1.98

MAIL STOP AMENDMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

1. Y. Wan et al., "The Survival of Antigen-Stimulated T Cells Requires NFkB-Mediated Inhibition of p73 Expression", Immunity, Vol. 18, March 2003, pp. 331-342.
2. V. Tergaonkar et al., "p53 stabilization is decreased upon NFkB activation: A role for NFkB in acquisition of resistance to chemotherapy", Cancer Cell, Vol. 1, June 2002, pp. 493-503.

Akira NAKAGAWARA, et al.
U.S. Appln. No.: 10/594,448
INFORMATION DISCLOSURE STATEMENT

3. G. Webster et al., "Transcriptional Cross Talk between NF-kB and p53", *Molecular and Cellular Biology*, May 1999, pp. 3485-3495.
4. K. Ryan et al., "Role of NF-kB in p53-mediated programmed cell death", *Nature*, Vol. 404, April 20, 2000, pp. 892-897.
5. H. Wu et al., "NF-kB Activation of p53: A Potential Mechanism for Suppressing Cell Growth in Response to Stress", *The Journal of Biological Chemistry*, Vol. 269, No. 31, August 5, 1994, pp. 20067-20074.
6. X. Sun et al., "Identification of a Novel p53 Promoter Element Involved in Genotoxic Stress-Inducible p53 Gene Expression", *Molecular and Cellular Biology*, Vol. 15, No. 8, August 1995, pp. 4489-4496.
7. A. Hellin et al., "Nuclear factor - *k*B-dependent regulation of p53 gene expression induced by daunomycin genotoxic drug", *Oncogene* 16, 1998, pp. 1187-1195.
8. M. Koegl et al., "A Novel Ubiquitination Factor, E4, Is Involved in Multiubiquitin Chain Assembly", *Cell*, Vol. 96, March 5, 1999, pp. 635-644.
9. S. Hatakeyama et al., "U Box Proteins as a New Family of Ubiquitin-Protein Ligases", *The Journal of Biological Chemistry*, Vol. 276, No. 35, August 31, 2001, pp. 33111-33120.
10. M. Ohira et al., "Identification and characterization of a 500-kb homozygously deleted region at 1p36.2-p36.3 in a neuroblastoma cell line", *Oncogene* 19, (2000), pp. 4302-4307.

Akira NAKAGAWARA, et al.
U.S. Appln. No.: 10/594,448
INFORMATION DISCLOSURE STATEMENT

11. J. Mahoney et al., "The human homologue of the yeast polyubiquitination factor Ufd2p is cleaved by caspase 6 and granzyme B during apoptosis", *Biochem. J.* 361, (2002), pp. 587-595.

12. Y. Bayon et al., "Inhibition of I κ B Kinase by a New Class of Retinoide-Related Anticancer Agents That Induce Apoptosis", *Molecular and Cellular Biology*, February 2003, pp. 1061-1074.

13. G. Melino et al., "p73: Friend of Foe in Tumorigenesis", *Nature Reviews Cancer*, Vol. 2, August 2002, pp. 605-615.

14. K. Vousden et al., "Live or Let Die: The Cell's Response to p53", *Nature Reviews Cancer*, Vol. 2, August 2002, pp. 594-604.

15. A. Birbach et al., "Signaling Molecules of the NF- κ B Pathway Shuttle Constitutively between Cytoplasm and Nucleus", *The Journal of Biological Chemistry*, Vol. 277, No. 13, March 29, 2002, pp. 10842-10851.

16. Y. Yamamoto et al., "Histone H3 phosphorylation by IKK- α is critical for cytokine-induced gene expression", *Nature*, Vol. 423, June 2003, pp. 655-659.

17. V. Anest et al., "A nucleosomal function for I κ B kinase- α in NF- κ B-dependent gene expression", *Nature*, Vol. 423, June 2003, pp. 659-663.

18. C. Lee et al., "Promoter specificity and stability control of the p53-related protein p73", *Oncogene* 18, (1999), pp. 4171-4181.

19. L. Ling et al., "NF- κ B-inducing kinase activates IKK- α by phosphorylation of Ser-176", *Proc. Natl. Acad. Sci. USA*, Vol. 95, March 1998, pp. 3792-3797.

Akira NAKAGAWARA, et al.
U.S. Appln. No.: 10/594,448
INFORMATION DISCLOSURE STATEMENT

One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after filing a request for continued examination (RCE) under § 1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

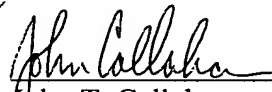
Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER


John T. Callahan
Registration No. 32,607

Date: November 13, 2006



Substitute for Form 1449 A & B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT***(use as many sheets as necessary)***Complete if Known**

Application Number	10/594,448
Confirmation Number	Unknown
Filing Date	September 26, 2006
First Named Inventor	Akira NAKAGAWARA
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	Q97365

Sheet 1 of 2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		Y. Wan et al., "The Survival of Antigen-Stimulated T Cells Requires NFkB-Mediated Inhibition of p73 Expression", Immunity, Vol. 18, March 2003, pp. 331-342.	
		V. Tergaonkar et al., "p53 stabilization is decreased upon NFkB activation: A role for NFkB in acquisition of resistance to chemotherapy", Cancer Cell, Vol. 1, June 2002, pp. 493-503.	
		G. Webster et al., "Transcriptional Cross Talk between NF-kB and p53", Molecular and Cellular Biology, May 1999, pp. 3485-3495.	
		K. Ryan et al., "Role of NF-kB in p53-mediated programmed cell death", Nature, Vol. 404, April 20, 2000, pp. 892-897.	
		H. Wu et al., "NF-kB Activation of p53: A Potential Mechanism for Suppressing Cell Growth in Response to Stress", The Journal of Biological Chemistry, Vol. 269, No. 31, August 5, 1994, pp. 20067-20074.	
		X. Sun et al., "Identification of a Novel p53 Promoter Element Involved in Genotoxic Stress-Inducible p53 Gene Expression", Molecular and Cellular Biology, Vol. 15, No. 8, August 1995, pp. 4489-4496.	
		A. Hellin et al., "Nuclear factor - kB-dependent regulation of p53 gene expression induced by daunomycin genotoxic drug", Oncogene 16, 1998, pp. 1187-1195.	
		M. Koegl et al., "A Novel Ubiquitination Factor, E4, Is Involved in Multiubiquitin Chain Assembly", Cell, Vol. 96, March 5, 1999, pp. 635-644.	
		S. Hatakeyama et al., "U Box Proteins as a New Family of Ubiquitin-Protein Ligases", The Journal of Biological Chemistry, Vol. 276, No. 35, August 31, 2001, pp. 33111-33120.	
		M. Ohira et al., "Identification and characterization of a 500-kb homozygously deleted region at 1p36.2-p36.3 in a neuroblastoma cell line", Oncogene 19, (2000), pp. 4302-4307.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO <u>INFORMATION DISCLOSURE</u> <u>STATEMENT BY APPLICANT</u> <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	10/594,448
				Confirmation Number	Unknown
				Filing Date	September 26, 2006
				First Named Inventor	Akira NAKAGAWARA
				Art Unit	Unknown
Examiner Name	Unknown				
Sheet	2	of	2	Attorney Docket Number	Q97365

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US			
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		J. Mahoney et al., "The human homologue of the yeast polyubiquitination factor Ufd2p is cleaved by caspase 6 and granzyme B during apoptosis", <i>Biochem. J.</i> 361, (2002), pp. 587-595.	
		Y. Bayon et al., "Inhibition of IκB Kinase by a New Class of Retinoide-Related Anticancer Agents That Induce Apoptosis", <i>Molecular and Cellular Biology</i> , February 2003, pp. 1061-1074.	
		G. Melino et al., "p73: Friend of Foe in Tumorigenesis", <i>Nature Reviews Cancer</i> , Vol. 2, August 2002, pp. 605-615.	
		K. Vousden et al., "Live or Let Die: The Cell's Response to p53", <i>Nature Reviews Cancer</i> , Vol. 2, August 2002, pp. 594-604.	
		A. Birbach et al., "Signaling Molecules of the NF-κB Pathway Shuttle Constitutively between Cytoplasm and Nucleus", <i>The Journal of Biological Chemistry</i> , Vol. 277, No. 13, March 29, 2002, pp. 10842-10851.	
		Y. Yamamoto et al., "Histone H3 phosphorylation by IKK-α is critical for cytokine-induced gene expression", <i>Nature</i> , Vol. 423, June 2003, pp. 655-659.	
		V. Anest et al., "A nucleosomal function for IκB kinase-α in NF-κB-dependent gene expression", <i>Nature</i> , Vol. 423, June 2003, pp. 659-663.	
		C. Lee et al., "Promoter specificity and stability control of the p53-related protein p73", <i>Oncogene</i> 18, (1999), pp. 4171-4181.	
		L. Ling et al., "NF-κB-inducing kinase activates IKK-α by phosphorylation of Ser-176", <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 95, March 1998, pp. 3792-3797.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to indicate here if English language Translation is attached.